



NEW! Wahl 150 & 170 Series Imagers

Instantly find Hot or Cold Spots
Withstands 2 Meter Drop Test!



IR / Visible Light / Picture-in-Picture / SpyLite™

Touch Screen for easy access of menu functions

Optional Telephoto and Wide Angle Lenses

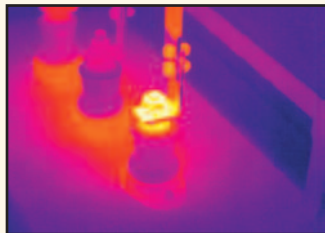
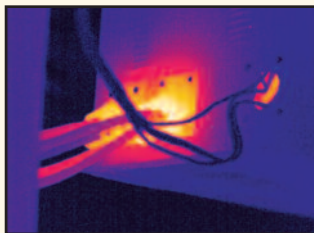
60Hz* or 9Hz Frame Rate

Model 170: Ultra High Thermal Sensitivity $\leq 0.04^{\circ}\text{C}$
Resolution: 384 x 288 with 110, 592 Pixels

Model 150: Thermal Sensitivity $\leq 0.05^{\circ}\text{C}$
Resolution: 160 x 120 with 19, 200 Pixels

- **SpyLite™** - only temperatures over or under preset point shown thermally over visible image
- **Picture-in-Picture** - all temperatures shown thermally over visible image
- **Large 3.6" LCD Touch Screen Display** - for quick and easy use of menu functions
- **Dual LED "Head Lights"** - easily light subject even in low light conditions
- **Ergonomic design** - with easy grip, trigger and hand strap for easy scanning
- **Thermal - Visible - PIP - SpyLite Image Save**
- **Thermal - Visible - Video Recording**
- **"z" models - 60 Hz or "a" models - 9 Hz** (Factory Set) ("a" models for use outside USA)
- **Laser Aiming** - pinpoints hot or cold spots
- **Field of View: 25° x 19°**
- **3.2 Megapixel CMOS Sensor**
- **Every Pixel Calibrated**
- **Engineered to withstand 2 meter Drop Test** - assures reliability and durability
- **Optional Lenses** - increase functionality
Telephoto: 2X and 4X**
Wideangle: 0.5X and Ultra Wideangle: 0.25X**
- **Real Time Image and Data transfer** - through Ethernet to Windows PC to manage settings and files, or view live video output
- **Bluetooth** - Wireless transfer of files to PC, or connect headset to record and play back verbal image annotation (Earphone/RS232)
- **Advanced Heat Spy Report and Analysis Software** - included for quick and professional reports with precise image and temperature analysis on any point in an image.

Unlimited Phone Support with every Heat Spy!



Find problems quickly, easily, and safely with the Wahl 150 and 170 Series

*Export Licensing Fee on 60Hz models may be required for your country, subject to US Government approval. No Export License required on 9Hz models. **Model 170 only.

Including **SPY-CARE™**

The **FIRST No-Fault warranty plan** in the industry is **INCLUDED** with your purchase!

We will repair or replace your camera for two years, for any reason - even if it's your fault - no questions asked!

Also includes:

FREE Training, FREE Phone Support,
FREE Annual Lifetime Recalibration, Inspection, and Firmware Upgrades.
(Excludes Battery and Micro SD Card)
See Spy-Care flyer at www.wahlheatspy.com for more details.)

Heat Spy® is a registered trademark of Wahl Instruments, Inc.

www.wahlheatspy.com

Specifications subject to change without notice

ISO 9001:2008
CERTIFIED QUALITY
MANAGEMENT SYSTEM

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PW1283
03/15

150 • 170 Series Thermal Imagers Specifications

Model Number	a150	z150	a170	z170
Frame Rate	9Hz	60Hz*	9Hz	60Hz*
Image Performance				
Detector Type	Uncooled Microbolometer Focal Plane Array (FPA)			
Detector Resolution	160 x 120		384 x 288	
Number of Pixels	19,200		110,592	
Field of View (FOV)	25° x 19°			
Spatial Resolution (IFOV)	2.73 mrad		1.37 mrad**	
Thermal Sensitivity	≤ 0.05 @ 30°C		≤ 0.04 @ 30°C Ultra High Sensitivity	
Focus Range	0.5 m to ∞			
Focus Type	Manual			
IR Digital Zoom	X2 or X4			
Spectral Range	8 - 14µm			
Visible Light Camera	3.2 Megapixel CMOS Sensor, Dual LED Head Lights			
Telephoto Lens Option Factory Upgrade	2X for 12.5° x 9.5° FOV			
	NA		4X for 6.25° x 4.75° FOV	
Wide Angle Lens Option Factory Upgrade	0.5X for 50° x 38° FOV			
	NA		0.25X for 100° x 76° FOV	
Image Display				
Thermal/Visible Light Image	Fast switch between Thermal, Visible Light, or Picture-in-Picture ¹ or SpyLite ²			
LCD Display	High Resolution 3.6" Color LCD Touch Screen, 640 x 480			
Image Control	11 Display Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White			
	Image Adjustment: Auto Ranging / Manual Level and Span / Adjustable Display Brightness and Contrast Control			
Measurement Analysis				
Measurement Range	-4° to 662°F (-20° to 350°C) User Selectable Temperature Extension to 1202°F (650°C)			
Measurement Accuracy	Greater of ±2% of reading or ±2°C. Instrument is not calibrated below -10°C.			
Measurement Correction	Auto / Manual			
Measurement Mode	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible and Visible)			
# of Measurement Spots	Up to 5 Moveable Spots, including Hot and Cold Seeking			
# of Measurement Areas	Up to 5 Movable and Sizeable Areas (Max, Min and Avg Temperatures)			
# of Measurement Lines	Up to 2 Moveable Lines, 1 Vertical, 1 Horizontal; Image Temperature Profile Lines			
Emissivity Correction	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table			
Reflected Temperature Compensation	Auto with manual reflected Temperature Adjustment			
Atmospheric Transmission Correction	Automatic Correction according to user input Object Distance, Humidity, and Temperature			
Alarm	High and Low Temperature Audible and Visible Alarm; Isotherm Visible Alarm			
Temperature Scale	User Selectable: °C, °F, and K			
User Settings	Date/Time, Temperature Unit, Brightness/Contrast, LCD Brightness and 8 Languages: English; Spanish; German; Portuguese; Korean; Russian; Simplified Chinese; Traditional Chinese			

* Export Licensing Fee on 60Hz models may be required for your country, subject to US Government approval. No Export License required on 9Hz models.

** 384 x 288 is not directly convertible to 640 x 480 imager display. Image is displayed as a 320 x 240 image. Full 384 x 288 resolution image, (1.09 mrad), downloads to computer.



¹ Picture-in-Picture - all temperatures shown thermally over visible image

² SpyLite - only temperatures over or under preset point shown thermally over visible image

Heat Spy® is a registered trademark of Wahl Instruments, Inc.

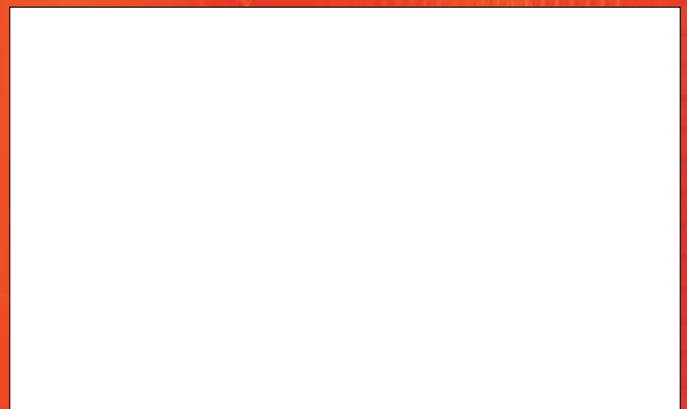
PW1283
03/15

Register your product at www.palmerwahl.com/register

Specifications subject to change without notice

Model Number	a150	z150	a170	z170
Frame Rate	9Hz	60Hz*	9Hz	60Hz*
Image Storage				
Removable Storage	8GB Micro SD, max 32GB			
Storage Mode	Manual Single Image Save or Programmable Auto Save to Micro SD Card, Single Thermal Image and Visible Image Save (with link option), Thermal, Visible, Picture-in-Picture ² and SpyLite ³ Video Save			
File Format (Thermal)	JPEG / H.264 (Both with Radiometric information)			
File Format / (Visible Light)	JPEG, MPEG-4			
Voice Annotation	Maximum 60 seconds per image, Microphone or Bluetooth Headset			
Text Annotation	Yes, from Predefined Inspection List			
Laser				
Laser Pointer	Class 2, < 1mW / 635nm, Red			
Record				
Report Analysis Software	Yes			
Video Output	User Selectable PAL and NTSC			
Freeze Frame/Save Image	Freeze Frame and Save Image, Thermal and/or Visible to SD Card			
Interface				
Micro SD Card Slot	Yes			
Mini-USB	Yes			
Network	Real time image and data transfer through Ethernet to Windows PC to manage settings and files, or view live video output			
Bluetooth	Wireless transfer of files to PC, or connect headset (not included) to record and play back verbal image annotation (Earphone/RS232)			
Video	Yes			
Power	DC 12V			
Environment				
Ambient Operating Temp	5° to 122°F (-15° to 50°C)			
Storage Temperature	-13° to 140°F (-25° to 60°C)			
Humidity	≤ 90% non-condensing			
IP Rating	IP54			
Drop Test	2 meters			
Power				
Power / Operating Time	1 Rechargeable Lithium Ion Battery, 2 Batteries provided for approx 3 hours continuous operation per battery			
Power Save Mode	Selectable Time Interval Auto Sleep to save battery, Auto Shut Off			
Charging System	Auxillary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger with International Plugs			
General Info				
Housing	Impact Resistant Molded Plastic & Hand Strap (fits either side); Dual Headlights; Microphone; Tripod Mounting/1/4"-20 Thread			
Dimensions	Width: 4.13 in. (105mm) x Length: 9.64 in. (245mm) x Height: 9 in. (230mm)			
Weight (w/o battery)	2.16 lbs (0.98 Kg)			
Software Compatibility	Microsoft Windows 2000, Windows XP, Vista, and 7			
Included Accessories	Spy-Care; Carrying Case with Shoulder Strap; Hand Strap; Display Sun Shade; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Ethernet Cable; Heat Spy Report & Analysis Software; Micro SD Card and Reader; Manual.			
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Auxiliary Charging Kit with: 12V DC Car Charger; AC/DC Power Supply/Charger with International Plugs			
Safety Certificates				
Shock Test/Vibration Test	25G, IEC68-2-29 / 2G, IEC68-2-6			
Immunity Tests/Emission Limits	Yes / Yes			

Heat Spy Thermal Imagers are available from:





NEW! Wahl CHIEF INSPECTOR



**Highest level of Resolution
Designed for the Professional**

BEST-IN-CLASS!

The a70 and z70 models include a 384 x 288 array with 110,592 pixels — 44% more pixels than 320 x 240 thermal imagers with 76,800 pixels.

Fully calibrated, high resolution camera captures clear, sharp images!

Easily load images to an iPad® using an SD adapter. The thermal images can be imported and stored in the regular photo application found on the iPad®, or used with a picture application like iPhoto®. The images can then be shared with other applications on the iPad®, offering the flexibility of easy to prepare reports.

Two temperature modes allow you to switch between the ranges of -4° to 356°F (-20° to 180°C) or 212° to 1112°F (100° to 600°C) to select the temperature range required for your application.

Temperature readings are always accurate. Quick stabilization circuitry enables the camera to acclimate to sudden ambient temperature changes in just a few minutes, compared to 30 - 45 minutes with other cameras.

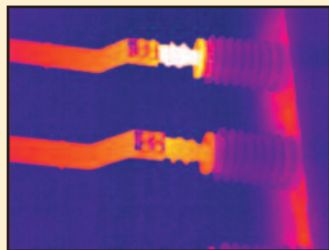
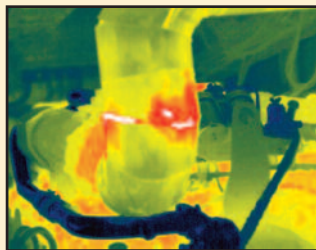
Simultaneously captures both a thermal and visible light picture, or either individually, with one pull of the trigger. View or download images to included Wahl Report Writer software, or an iPad®, with selectable voice recording, up to 45 seconds per picture.

Thermal line analysis allows the user to select a target of interest as a temperature reference point, and show a relative comparison as a percentage between the target temperature and the temperatures in the surrounding area. This enables the user to quickly find potential problem areas in need of further attention.

The z70 frame rate is 30Hz. The a70 features a 9Hz frame rate for export without license restrictions.



IP54



Find problems quickly, easily, and safely with the Wahl z70

Including **SPY-CARE™**

The FIRST No-Fault warranty plan in the industry is INCLUDED with your purchase!

We will repair or replace your camera for two years, for any reason - even if it's your fault - no questions asked!

Also includes:

FREE Training, FREE Phone Support,
FREE Annual lifetime recalibration, inspection, and
firmware upgrades. (Excludes Battery and SD Card, see
Spy-Care flyer on our website for more details.)

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iPad® and iPhoto® are registered trademarks of Apple.

Specifications subject to change without notice

www.wahlheatspy.com

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Digital version of catalog may
differ from printed version.

PW1282
May 2013 Rev A

a70 • z70 CHIEF INSPECTOR Specifications

Model Number	a70	z70
Frame Rate	9Hz	30Hz*
Sensor Info		
Detector	Uncooled Microbolometer Focal Plane Array (EPA)	
Detector Resolution	384 x 288	
Spectral Range	8 - 14µm	
Thermal Sensitivity	≤ 0.06 @ 30°C	
Image Performance		
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
Visible Light Camera	1.3 Megapixel CMOS Sensor	
Lens Parameter		
Field of View	25° x 19°	
Focus Range	0.1 m to ∞ and beyond	
Focus Type	Manual	
Spatial Resolution	1.37 mrad**	
Measurement Analysis		
Measurement Range	-4° to 356°F (-20° to 180°C) or 212° to 1112°F (100° to 600°C) Low/High Temperature User Switchable:	
Measurement Accuracy	Greater of ±2% of reading or ±2°C Instrument is not calibrated below -10°C.	
Image Control	11 Display Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White	
	Image Adjustment: Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Measurement Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible and Visible)	
# of Measurement Spots	1 Hot, 1 Cold, plus 2 Adjustable	
# of Measurement Areas	Up to 3 Movable and Sizeable Areas (Max, Min and Avg Temperatures)	
# of Measurement Lines	Up to 2 Moveable Lines, 1 Vertical, 1 Horizontal; Image Temperature Profile Lines	
T Reflect	Manual Adjustment	
T Correct	Manual Adjustment	
IR Digital Zoom	X 2 or X 4	
Thermal/Visible Image	Toggle between Thermal and Visible Light	
Alarm	High and Low Temperature Audible and Visible Alarm; Isotherm Visible Alarm	
Temperature Scale	User Selectable: °C, °F, and K	
User Settings	Date/Time, Temperature Unit, Brightness/Contrast, LCD Brightness, and 11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Emissivity Range	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table	

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** 384 x 288 is not directly convertible to 640 x 480 imager display. Image is displayed as a 320 x 240 image. Full 384 x 288 resolution image, (1.09 mrad), downloads to computer.

Model Number	a70	z70
Image Storage		
Removable Storage	2GB SD / Time Stamped	
Storage Mode	Manual Single Image Save or Programmable Auto Save to SD Card	
File Format (Thermal)	JPEG plus Temperature in 14 bit data	
File Format/Size (Visible)	JPEG / 100K (Typical Value)	
Voice Annotation	Maximum 45 seconds per image	
Text Annotation	NA	
Laser		
Laser Pointer	Class 2, < 1mW / 635nm, Red	
Record		
Report Analysis Software	Yes	
Video Output	User Selectable PAL and NTSC	
Freeze Frame/Save Image	Freeze Frame and Save Image, Thermal and/or Visible to SD Card	
Environment		
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity	≤ 90% non-condensing	
IP Rating	IP 54	
Power		
Power	1 Rechargeable Lithium Ion Battery	
Operating Time	2 Batteries provide approx 4 hours operation	
Power Save Mode	Selectable Time Interval Auto Sleep to save battery, Auto Shut Off	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger; 12V DC Car Charger	
General Info		
Housing	Impact Resistant Molded Plastic and Wrist Strap	
Mounting	Hand Held with Tripod mounting / 1/4"-20 Thread	
Dimensions	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm)	
Weight (w/o battery)	1.65 lbs (0.75 Kg)	
Software Compatibility	Microsoft Windows 2000, Windows XP, Vista, and Windows 7	
Included Accessories	Spy-Care, Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Heat Spy Report & Analysis Software; SD Card/Reader; User Manual	
Optional Accessories	NIST Traceable Certificate of Conformance; Extended Warranty; Auxiliary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	
Safety Certificates		
Shock Test	25G, IEC68-2-29	
Vibration Test	2G, IEC68-2-6	
Immunity Tests	Yes	
Emission Limits	Yes	

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PW1282
May 2013 Rev A



z50 INSPECTOR

Designed for the pro, save and export thermal and digital images with easy report writing software.

z30 DETECTOR

Designed for on the spot routine maintenance inspections.

First upgradeable camera *after purchase*. Maximize scalability by upgrading your camera with up to 15 configurations - *at any time!*

First *user* upgradeable camera. Maximize value by easily upgrading your z30 Detector to a z50 Inspector - *in the field!*

First extended warranty plan to *include* annual recalibration, inspection and firmware upgrades. Maximize performance and *increase the life of your Heat Spy!* (Excludes Battery and SD Card)

FEATURES

Upgrade both models with a High Temperature option, Wide Angle Lens and / or Telephoto Lens - *at any time!*

"z" speed at 30 Hertz captures clear, sharp images!

Camera acclimates quickly. Sudden ambient temperature changes won't slow you down!

Every Pixel is individually calibrated!

"Double Vision" provides **simultaneous capture** of both a Thermal and Digital picture, and can include up to a 45 second voice recording. (z50 Series only)

Hands-free flashlight (optional) screws into camera to brighten dark areas for clear digital pictures. Operates on it's own internal battery, enabling longer camera battery life.

Lease the camera at 0% interest (Call Customer Service for requirements, USA Customers only)

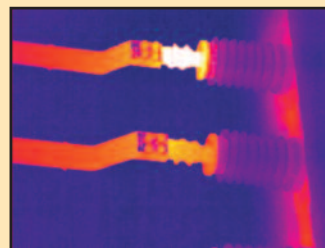
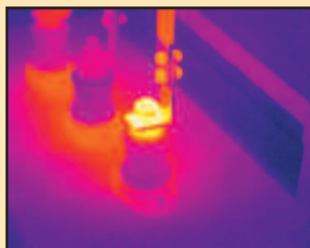
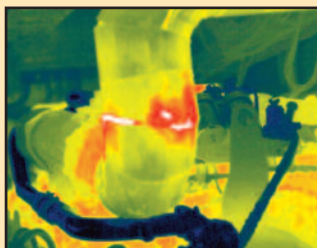
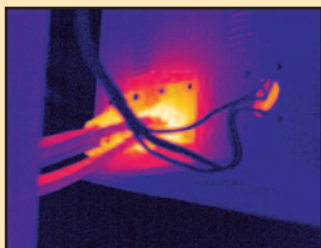
We are so confident that you will love this new camera that we are offering a 48 hour money back guarantee! (USA Customers only)

*Export Licensing fee on 30Hz models may be required for your country, subject to US Government approval.
No Export License required on 9Hz models.



**Buy it, you'll like it; 48 hour
Money Back Guarantee***

* USA Customers only



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PW1280z
October 2011 Rev C

APPLICATIONS
for many Industries

Aerospace
Automotive
Asphalt & Roofing
Breweries
Beverage Processing
Canning
Chemical
Coal & Mineral Mining
Condition Monitoring
Confectionery
Cosmetics
Dairy Processing
Electrical
Energy Audits
Facilities Management
Fire Fighting
Food Processing
Food Service
Glass
Government
Home Inspection
HVAC & Irrigation
Meat Processing
Mechanical
Military
Natural Gas
Oil & Petroleum
Petrochemical
Pharmaceutical
Pipe, Valve & Fitting
Plumbing
Police Search/Rescue
Poultry Processing
Power Generation
Pulp & Paper
Research & Development
Plastics
Rubber
Sanitary Processing
Semiconductor
Steel & Iron
Telecommunications
Test & Measurement
Verification
Water & Wastewater
Weatherization

and more!



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Specifications	z30 Series Detector	z50 Series Inspector
UPGRADE Model	Upgrade to z50 Inspector - in the Field!	
Measurement Range	-4° to 356°F (-20° to 180°C)	
UPGRADE to High Temperature	212° to 1112°F (100° to 600°C) (User Upgradeable in the Field)	
Temperature Accuracy	Greater of $\pm 2\%$ of reading or $\pm 2^\circ\text{C}$. Instrument is not calibrated below -10°C .	
Temperature Scale	User Selectable $^\circ\text{C}$, $^\circ\text{F}$, and K	
Number of Measurement Spots	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Field of View	17.5° x 13°	
Detector Resolution	160 X 120	
Spectral Range	8-14 μm	
Thermal Sensitivity	$\leq 0.1^\circ\text{C}$ @ 30°C	
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
IR Digital Zoom	X 2	
Frame Rate	"z" models - 30Hz* (may be subject to export licensing fee)	
Display Color Palettes	4 Color Palettes: Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow (Additional Palettes with Upgrade)	11 Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White
Image Adjustment	Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Languages	11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Laser Pointer	Class 2 < 1mW / 635nm, Red	
Auto Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T, High Temp Alarm (Audible/Visible) (Additional capabilities with Upgrade)	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible/Visible)
Number of Measurement Areas	(Available with Upgrade)	Up to 3 Movable & Sizeable Areas (Max, Min & Avg)
Emissivity Correction	Adjustable from 0.01 to 1.00 (Built-in Emissivity Table with Upgrade)	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	(Available with Upgrade)	Manual Adjustment
Visible Light Camera	(Available with Upgrade)	1.3 Megapixel CMOS Sensor
Thermal/Visible Light Image	(Available with Upgrade)	Toggle between Thermal and Visible Light
Alarm	High Temperature Audible and Visible Alarm (Additional functions with Upgrade)	High Temperature Audible and Visible Alarm Isotherm Visible Alarm
UPGRADE Optics	Wide Angle (35° x 26° FOV), and/or Telephoto (8.75° x 6.5° FOV) (Factory Upgradeable options)	
Report Analysis Software	(Available with Upgrade)	Yes
Image Storage	(Available with Upgrade)	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only (Additional capabilities with Upgrade)	Freeze Frame and Save Image, Thermal and/or Visible to SD Card
Storage Mode	(Available with Upgrade)	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	(Available with Upgrade)	Maximum 45s per image
File Format (Thermal)	(Available with Upgrade)	JPEG plus Temperature in 14 bit data
File Format / Size (Visible)	(Available with Upgrade)	JPEG / 60K (Typical value)
Video Output	User Selectable PAL and NTSC	
Dimensions/Weight w/o battery	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm) / 1.65 lbs (0.75 Kg)	
Power / Operating Time	1 Rechargeable Lithium Ion Battery / 2 Batteries provided, approx. 3 hours operation per battery	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger	
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity/IP Rating	$\leq 90\%$ non-condensing / IP54	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Report & Analysis Software; SD Card & Reader; User Manual; Spy-Care(30 Series upgrade)	
Options	NIST Traceable Certificate of Conformance; Extended Warranty; Auxiliary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	

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PW1280z
October 2011 Rev C

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FEATURES

Upgrade both models with a High Temperature option, Wide Angle Lens and / or Telephoto Lens - *at any time!*

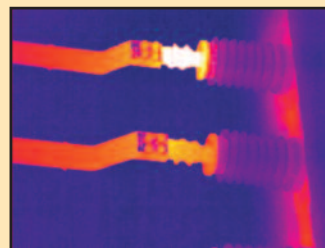
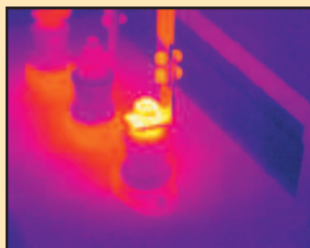
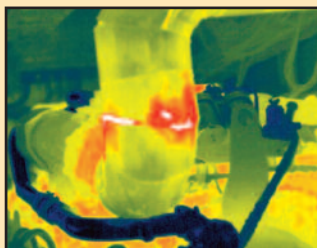
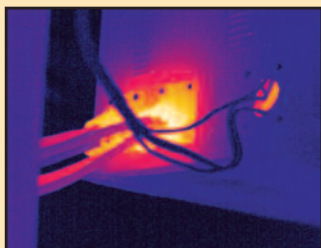
"a" speed at 9 Hertz captures clear, sharp images!

Camera acclimates quickly. Sudden ambient temperature changes won't slow you down!

Every Pixel is individually calibrated!

"Double Vision" provides **simultaneous capture** of both a Thermal and Digital picture, and can include up to a 45 second voice recording. (z50 Series only)

Hands-free flashlight (optional) screws into camera to brighten dark areas for clear digital pictures. Operates on it's own internal battery, enabling longer camera battery life.



Find problems quickly, easily, and safely with the Wahl Heat Spy.

Heat Spy® is a registered trademark of Wahl Instruments, Inc.

www.wahlheatspy.com

Specifications subject to change without notice

Digital version of catalog may differ from printed version.

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PW1280a
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APPLICATIONS
for many Industries

Aerospace
Automotive
Asphalt & Roofing
Breweries
Beverage Processing
Canning
Chemical
Coal & Mineral Mining
Condition Monitoring
Confectionery
Cosmetics
Dairy Processing
Electrical
Energy Audits
Facilities Management
Fire Fighting
Food Processing
Food Service
Glass
Government
Home Inspection
HVAC & Irrigation
Meat Processing
Mechanical
Military
Natural Gas
Oil & Petroleum
Petrochemical
Pharmaceutical
Pipe, Valve & Fitting
Plumbing
Police Search/Rescue
Poultry Processing
Power Generation
Pulp & Paper
Research & Development
Plastics
Rubber
Sanitary Processing
Semiconductor
Steel & Iron
Telecommunications
Test & Measurement
Verification
Water & Wastewater
Weatherization

and more!



IP54

Specifications	a30 Series Detector	a50 Series Inspector
UPGRADE Model	Upgrade to a50 Inspector - in the Field!	Full Feature Series
Measurement Range	-4° to 356°F (-20° to 180°C)	
UPGRADE to High Temperature	212° to 1112°F (100° to 600°C) (User Upgradeable in the Field)	
Temperature Accuracy	Greater of ± 2% of reading or ± 2°C. Instrument is not calibrated below -10°C.	
Temperature Scale	User Selectable °C, °F, and K	
Number of Measurement Spots	1 Hot Seeking, 1 Cold Seeking, 2 Adjustable	
Field of View	17.5° x 13°	
Detector Resolution	160 X 120	
Spectral Range	8-14µm	
Thermal Sensitivity	0.1°C @ 30°C	
LCD Display	High Resolution 3.5" Color LCD Screen, 640 x 480	
IR Digital Zoom	X 2	
Frame Rate	"a" models - 9Hz* (no export licensing fee)	
Display Color Palettes	4 Color Palettes: Ironbow; Negative Grayscale; Rainbow Blue-Red; High Contrast Blue-Yellow (Additional Palettes with Upgrade)	11 Color Palettes: Ironbow; Negative Grayscale; Positive Grayscale; Amber; Hot Metal; Cool Metal; Rainbow Green-Red; Rainbow Blue-Red; Rainbow Black-White; High Contrast Blue-Yellow; and High Contrast Violet-White
Image Adjustment	Auto Ranging / Manual Level and Span / Adjustable Display Brightness Control	
Languages	11 Languages: English; Spanish; French; German; Italian; Portuguese; Korean; Japanese; Russian; Simplified Chinese; and Traditional Chinese	
Laser Pointer	Class 2 < 1mW / 635nm, Red	
Auto Correction	Auto Correction of Microbolometer with Adjustable Time Interval or Push Button Manual	
Measurement Mode	Spots, Delta T, High Temp Alarm (Audible/Visible) (Additional functions with Upgrade)	Spots, Areas, Lines, Isotherms, Delta T, Alarms (Multiple Audible/Visible)
Number of Measurement Areas	(Available with Upgrade)	Up to 3 Movable & Sizeable Areas (Max, Min & Avg)
Emissivity Correction	Adjustable from 0.01 to 1.00 (Built-in Emissivity Table with Upgrade)	Adjustable from 0.01 to 1.00 with Built-in Emissivity Table
T Reflect	Manual Adjustment	
T Correct	(Available with Upgrade)	Manual Adjustment
Visible Light Camera	(Available with Upgrade)	1.3 Megapixel CMOS Sensor
Thermal/Visible Light Image	(Available with Upgrade)	Toggle between Thermal and Visible Light
Alarm	High Temperature Audible and Visible Alarm (Additional functions with Upgrade)	High Temperature Audible and Visible Alarm Isotherm Visible Alarm
UPGRADE Optics	Wide Angle (35° x 26° FOV), and/or Telephoto (8.75° x 6.5° FOV) (Factory Upgradeable options)	
Report Analysis Software	(Available with Upgrade)	Yes
Image Storage	(Available with Upgrade)	2GB SD / Time Stamped
Freeze Frame/Save Image	Freeze Frame only (Additional functions with Upgrade)	Freeze Frame and Save Image, Thermal and/or Visible to SD Card
Storage Mode	(Available with Upgrade)	Manual Single Image Save or Programmable Auto Save to SD Card
Voice Annotation	(Available with Upgrade)	Maximum 45s per image
File Format (Thermal)	(Available with Upgrade)	JPEG plus Temperature in 14 bit data
File Format / Size (Visible)	(Available with Upgrade)	JPEG / 60K (Typical value)
Video Output	User Selectable PAL and NTSC	
Dimensions/Weight w/o battery	Width: 4.5 in. (115mm) x Length: 5.9 in. (150mm) x Height: 9 in. (230mm) / 1.65 lbs (0.75 Kg)	
Power / Operating Time	1 Rechargeable Lithium Ion Battery / 2 Batteries provided, approx. 3 hours operation per battery	
Charging System	External AC Battery Charger included; In Camera Charging with optional AC/DC Battery Charger	
Ambient Operating Temperature	5° to 122°F (-15° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Humidity/IP Rating	≤ 90% non-condensing / IP54	
Included Accessories	Carrying Case; Wrist Strap; Lens Cap; 2 Rechargeable Lithium Ion Batteries; External AC Battery Charger; Video Out Cable; Report/Analysis Software; SD Card & Reader; User Manual; Spy-Care(30 Series upgrade)	
Options	NIST Traceable Certificate of Conformance; Extended Warranty; Auxiliary Charging Kit with: 12V DC Car Charger, AC/DC Power Supply/Charger and International Plugs	

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Announcing
SPY-CARE™

**THE FIRST
NO-FAULT
THERMAL
IMAGER
WARRANTY
IN THE
INDUSTRY**

Repaired or Replaced
FREE for **TWO** years,
for **ANY** reason.*



Investigate at wahlheatspy.com
and see what you've been missing.



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* See details on page 2

SPY-CARE™

Make the most of your new thermal imaging camera with our new SPY-CARE™ Program.

THE FIRST NO-FAULT THERMAL IMAGER WARRANTY - REPAIRED OR REPLACED FREE FOR TWO YEARS, FOR ANY REASON.

The Industry's FIRST No-Fault Warranty now comes with each **Heat Spy 50 Series Inspector** sold. SPY-CARE™ is 2 year NO-FAULT warranty protection. If your Heat Spy Inspector is damaged, Wahl will repair or replace your camera FREE. If you drop it from a 20 ft ladder, if it falls into a swimming pool, or if you back over it with a truck - any unintentional damage - Wahl will fix or replace your camera for FREE. This protection is for the duration of the warranty period of two years from the original purchase date. Get unlimited repairs and one replacement camera (if camera cannot be repaired) during the two year warranty period - a \$3,495.00 value!

Effective July 16, 2012 SPY-CARE™ is included on all a50 or z50 Inspector Series Heat Spy Thermal Imaging cameras. SPY-CARE™ covers units sold worldwide, and does not include shipping and handling charges. Customer pays shipping both ways. Customers outside the USA are required to pay export licensing fee, if applicable. SPY-CARE™ covers only the camera, and does not cover any included or additional accessories, including but not limited to batteries, lenses or SD cards. SPY-CARE™ does not cover the 30 Series camera which is covered by the standard warranty.

SPY-CARE™ does not cover any intentional damage, such as disassembly. Intentional damage will void any warranty coverage.

FREE Lifetime Recalibration and Firmware Updates on 50 Series

FREE ANNUAL Lifetime Standard Calibration of your **Heat Spy 50 Series Inspector** is included with your purchase – a savings of up to \$250 for each calibration. Contact us to obtain an RMA number for returning your Heat Spy Inspector to Wahl. We will calibrate your Heat Spy and install any new firmware updates at no charge.

*Free Recalibration of wide angle or tele-photo lenses is not included in this offer. Please mention any additional lenses when requesting an RMA, as there is an additional charge for their calibration. This will ensure your Heat Spy is properly calibrated to your specific lenses. Customer pays shipping both ways.

Rental Program - Try a Heat Spy in your Facility

Would you like to Rent a Heat Spy Camera or try a Heat Spy in your facility? Wahl offers a Rental plan on **Heat Spy 50 Series Inspector, and 50 Series Detector** Imagers. Experience the power and usefulness of the Heat Spy for your specific application. 100% of the rental charges can be applied toward the purchase of the camera within a year of the rental date. See Rental Agreement for more details.

*Your Heat Spy rental must be secured with a credit card at full value of camera and accessories.

*USA and Canada ONLY. Customer pays shipping both ways.

FREE Competitor Camera Loaner Program

Do you own a thermal imager manufactured by a Wahl competitor that is in for repair? Repairs can be slow, leaving you without an important tool for an extended period of time. Take advantage of Wahl's FREE Competitive Camera Loaner Program. Submit proof of your instrument's return for repair (e.g., RMA paperwork), and Wahl will loan you a **Heat Spy 50 Series Inspector** for use for up to 30 days, FREE. Don't compromise productivity while waiting for slow repairs.

*USA ONLY. Customer pays shipping both ways. Quantities are limited, and offer is based on availability; subject to credit approval. Loaner camera must be secured by a company credit card and purchase order.

FREE Thermography Training

Wahl offers free thermography training on a monthly basis at our Asheville, NC, USA facility. This eight hour intensive course will give you the knowledge and skills necessary to interpret thermal images. *Training is available to anyone, whether you own a Heat Spy or not.* Presented by our T/IRT Level II Certified Trainers, this training is invaluable to any potential thermographer.

*Space is limited and available on a first come, first serve basis. Customer pays own expenses. Visit our website to see our scheduled training dates, or contact us to learn more.

FREE Emergency Replacement Service

Heat Spy 50 Series Inspector owners can rest assured that they will always have a thermal imaging camera on hand. If your Heat Spy is in for repair – and you need it – we will send you a replacement camera to use in the meantime – FREE. You never have to worry about your livelihood or productivity by being without your most useful tool.

*USA and Canada ONLY. Customer pays shipping both ways.

Wahl Heat Spy products are available from:



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www.wahlheatspy.com

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PW1284
August 2012 Rev A



Investigate at wahlheatspy.com
and see what you've been missing.

Wahl Heat Spy®
z Series Thermal Imaging Cameras
Money Back Guarantee* (MBG)
Models z30, z50, z70, z150, & z170

“Buy it, you’ll like it; GUARANTEED”!

“BUY IT, YOU’LL LIKE IT; GUARANTEED!”

Wahl believes that if you buy one of the units listed above you will be completely satisfied with the products performance. If not, return the unit in this case with all of the accessories in “like new” condition within 48 hours of receipt, and we will credit you the full amount of your purchase, no questions asked. *(This includes the cost of the unit, accessories and ground shipping only)* Thus, you can be assured that the thermal imaging camera will perform as expected. If you are not satisfied, contact Wahl to receive an RMA number so you can return the unit at no cost to you. Call 1-800-421-2853 or 828-658-3131.

“Buy it, you’ll like it; more than GUARANTEED”!

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Revised 03/15



Rent the z30, z50 or z70 Thermal Imaging Camera!

Curiosity, budget concerns, or single project? All situations which can be resolved by renting Wahl's Heat Spy Imager!

Thermal Imaging is the best non-invasive method for diagnosing potential problems without damage to property, danger to person, or shutdown of process.

Rental includes **FREE UNLIMITED PHONE SUPPORT**, making it easier than ever to use and/or evaluate the use of a thermal imager for your application.

The camera comes to you ready to use out of the box. We'll deliver it fast so you can get started with your projects. One (1) day minimum rental period allows you to make the most of your time and money, and see what our camera can do for you.

Call and reserve your camera today!

Our Customer Service Department is ready to get you started:
1-800-421-2853 or 828-658-3131.

**z Series Thermal
Imagers deliver what
you need to do the job!**



Model Number	z30 Detector	z50 Inspector	z70 Inspector	plus Wide Angle Lens upgrade ¹	plus Telephoto Lens upgrade ¹	plus High Temperature upgrade ¹
List Price	\$2295.00	\$2995.00	\$4495.00	\$700.00	\$1700.00	\$300.00
Rental	\$50.00/day	\$62.00/day	\$150.00/day	\$12.50/day	\$30.00/day	\$10.00/day
Handling Fee	No handling fee					
Shipping Charges	Customer pays shipping charges both ways					

Terms: One (1) day minimum rental period, **secured by credit card at full value of camera and upgrades.**

Additional identification may be required to complete transaction.

Rentals are available in USA & Canada ONLY, subject to approval and availability.

Rental period begins the day the unit is delivered to your door via UPS Next Day Air, and ends the day the unit is delivered to Wahl Instruments by UPS or FedEx UPS Next Day Air, at the customer's risk and expense, in it's original box.

Customer is responsible for payment of shipping charges both ways. Shipping services can be determined at time of order.

¹ Not available on 70 Series

Important Note: All customers must pay per day rental charges for upgrades.

Wahl Heat Spy® Imagers Rent to Own Program

Wahl agrees to allow individuals the opportunity to buy the rental unit at the end of the rental period, or within one year from last rental ending date. Wahl will allow **100% of the rental cost** of the camera and upgrades incurred (if applicable) during the prior 12 months to be applied towards the purchase of the rented camera.

Calibration Services Available

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Wahl Heat Spy® Imager z Series Rental Agreement

Please complete and Fax
back to 828-658-0728

Name: _____ Company: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____

Email: (REQUIRED) _____

1. Wahl Instruments, Inc. agrees to rent a thermal imaging camera to the person and company named above, for a minimum of 1 calendar day. (USA & Canada only.) Subject to approval and availability.
2. **Rental will be secured by credit card at full value of camera and accessories. Additional identification may be required to complete transaction.**
3. Rental period begins the day the unit is delivered to your door via UPS Next Day Air, and ends the day the unit is delivered to Wahl Instruments by UPS or FedEx UPS Next Day Air, at the customer's risk and expense, in its original box. **Customer is responsible for payment of shipping charges both ways.** Shipping services can be determined at time of order.
4. During the rental period the customer listed above shall be responsible for:
 - a. The proper storage and protection of the rental unit.
 - b. Any loss or damage to the unit incurred during the rental period at the cost of repairing the unit and/or upgrade accessories up to the full value of rented products. Damage which occurred during shipment must be claimed the same day camera was received.
 - c. Returning the product(s) in the same packaging in which it was received.
5. The customer agrees to not modify, open or dismantle the rental product.
6. **Rental charges apply to rentals that exceed the agreed upon rental period.**
7. **All customers must pay per day rental charges for upgrades.**
8. Wahl agrees to allow Company the opportunity to buy rental unit at the end of the rental period, or within one year from last rental ending date. Wahl will allow 100% of the rental cost incurred during the prior 12 months to be applied towards the purchase of the rented camera. (Shipping charges are not included) USA Customers only.

Customer Signature: _____ Date: _____

Requested beginning dates:

Requested ending dates:

Approved beginning dates:

Approved ending dates:

Rental Worksheet				
Model Number	List Price	Rental Price	Number of Rental Days	Rental Charges
z70 Camera ____	5995.00	\$175.00/day	x ____	\$ ____
z50 Camera ____	\$2995.00	\$62.00/day	x ____	\$ ____
z30 Camera ____	\$2295.00	\$50.00/day	x ____	\$ ____
¹ Wide Angle Lens ____	\$700.00	\$12.50/day	x ____	\$ ____
¹ Telephoto Lens ____	\$1700.00	\$30.00/day	x ____	\$ ____
¹ High Temperature ____	\$700.00	\$10.00/day	x ____	\$ ____
Total amount secured by credit card	\$ ____		Total Rental Charges	\$ ____

Approval of Wahl Representative:

¹ Not available
on 70 Series
* Required

Credit Card Info			
*Credit Card Type	Amex	MasterCard	Visa Discover
*Company Credit Card #			
Expiration Date		Security Code	
*Name on Card			
*Drivers License # and State			



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